Discussion of K. Maskus & K. Saggi (2014) “International Technology Transfer: Analysis from the Perspective of Developing Countries”

Walter G. Park
American University, Washington, D.C.
### Innovation: Global Distribution

**Patent Priority Filings**

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed Countries</td>
<td>85.9%</td>
<td>67.4%</td>
</tr>
<tr>
<td>Developing Countries</td>
<td>14.0%</td>
<td>32.5%</td>
</tr>
<tr>
<td>Least Developed</td>
<td>&lt;0.1%</td>
<td>&lt;0.1%</td>
</tr>
<tr>
<td>Countries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing Countries*</td>
<td>2.4%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

*Excluding China, South Korea, and Taiwan. Classification based on U.N.

## Technology Transfer: Global Distribution*

<table>
<thead>
<tr>
<th>Year</th>
<th>Trade</th>
<th></th>
<th>FDI</th>
<th></th>
<th>Licensing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed Countries</td>
<td>71.7%</td>
<td>59.4%</td>
<td>83.7%</td>
<td>75.8%</td>
<td>87.1%</td>
<td>81.0%</td>
</tr>
<tr>
<td>Developing Countries</td>
<td>27.7%</td>
<td>39.5%</td>
<td>16.0%</td>
<td>23.8%</td>
<td>12.9%</td>
<td>19.0%</td>
</tr>
<tr>
<td>Least Developed Countries</td>
<td>0.6%</td>
<td>1.1%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>&lt;0.1%</td>
<td>&lt;0.1%</td>
</tr>
<tr>
<td>Developing Countries**</td>
<td>20.9%</td>
<td>25.7%</td>
<td>13.3%</td>
<td>20.2%</td>
<td>8.6%</td>
<td>11.8%</td>
</tr>
</tbody>
</table>

*Volumes measured in terms of sums of Export-Import Flows or Outward-Inward Stocks.

** Excluding China, South Korea, and Taiwan

Highlights

- Role of IPR mixed and benefits concentrated
- Structural impediments to inward TT for low-income countries

Channels of Inward TT

- Traditional: FDI, Trade, Licensing, Joint Ventures
- Thinking broader: Open innovation, Global Innovation Networks (GIN), and Migration

Goals: Access to Knowledge (A2K) and Capacity-Building

Make inward TT incentive-compatible (cf. China’s indigenous innovation policy)

IPR should be tailored to developing country needs
Policy Actions: Further Elaboration

- **Global Innovation Networks (GIN)**
  - Narrow definition: R&D Affiliates of MNCs
  - Broader: startups, academia, public research labs, SSO, gov’t agencies
  - Challenges: participation from low-income; reduce barriers (regulatory and technical); meet R&D needs in low-income areas, such as in essential medicines, environment, ICT infrastructure, education, energy, agriculture, …

- **Access to Basic Science & Technology (ABST)**
  - Support GINs – facilitate international diffusion of S&T resources (researchers, funds, databases, publications, …)
  - Create common pools – e.g. knowledge, ‘know-how’ available for licensing – and norms for distribution
Complementary Developments

- **GIN & ABST** can latch on to:
  - ‘User Rights’ Research
    - Flexibilities, limitations & exceptions
    - Adaptations, Investments and Industries based thereon
  - Creative Commons (CC) vs. ©
    - Yield/waive IPRs
    - Public licensing model (Attribution/Commercial/Derivative/Sharing)
  - Open Educational Resources (OER)
    - Address structural factors (human K development, absorptive capacities)
    - Open licensing model (allows free use & repurposing of works)